WHAT IS CLAIMED IS:

1. A composition, comprising:

a C_n-Ab, wherein C_n is a fullerene or nanotube comprising n carbon atoms, and Ab is a moiety comprising an antigen-binding site and is linked to the C_n.

2. The composition of claim 1, wherein the Ab is covalently linked to the C_n.

3. The composition of claim 1, wherein the C_n is substituted with one or more water-solubilizing groups.

4. The composition of claim 1, wherein the Ab comprises an antigen-binding site selected from ZME-018, SCFVMEL, dSCFVMEL, GD2, HuM195, herceptin, BACH 250, ML 3-9, C 6.5, or αMMP9.

5. The composition of claim 1, further comprising a pharmaceutically-acceptable carrier.

6. The composition of claim 1, further comprising a therapeutic molecule associated with the C_n-Ab.

7. The composition of claim 6, wherein the therapeutic molecule is covalently bound to the C_n.

8. The composition of claim 6, wherein the C_n is substituted with a charged group and the therapeutic molecule is ionically associated with the polar group.

9. The composition of claim 6, wherein the therapeutic molecule is paclitaxel, doxorubicin, vincristine, or cisplatin.

10. A method of treating a disease in a mammal, comprising:

administering to the mammal an effective amount of a composition comprising (i) a C_n-Ab, wherein C_n is a fullerene or nanotube comprising n carbon atoms, and Ab is a moiety comprising an antigen-binding site and is linked to the C_n and (ii) a pharmaceutically-acceptable carrier.

11. The method of claim 10, wherein the Ab is covalently linked to the C_n.

12. The method of claim 10, the C_n is substituted with one or more water-solubilizing groups.

13. The method of claim 10, wherein the Ab comprises an antigen-binding site selected from ZME-018, SCFVMEL, dSCFVMEL, GD2, HuM195, herceptin, BACH 250, ML 3-9, C 6.5, or αMMP9.

14. The method of claim 10, wherein the disease is an oxidative stress disease.

15. The method of claim 10, wherein the composition is administered at a dosage of from about 0.001 mg C_n per kg body weight per day to about 1 g C_n per kg body weight per day.

16. The method of claim 10, wherein the composition further comprises a therapeutic molecule associated with the C_n-Ab.

17. The method of claim 16, wherein the therapeutic molecule is paclitaxel, doxorubicin, vincristine, or cisplatin.

18. The method of claim 16, wherein the composition is administered at a dosage of from about 0.001 mg therapeutic molecule per kg body weight per day to about 1 g therapeutic molecule per kg body weight per day.

19. The method of claim 10, wherein the method further comprises administering an adjuvant to the mammal, wherein the adjuvant dissociates the therapeutic molecule from the C_n-Ab.

20. A method for administering therapeutic molecules to a mammal, comprising:

administering to the mammal an effective amount of a composition comprising a nanometric liposome, wherein the therapeutic molecule is located on the surface of the liposome, between layers of the liposome, or entrapped within the liposome.